

# TREE PEST UPDATES

75 Santa Barbara Rd, 2nd floor, Pleasant Hill, CA 94523-4488 (925) 646-6540  
724 Third St., Brentwood, CA 94513 (925) 634-3012

April 9, 2002

## CODLING MOTH

**HOST CROPS:** Apple, Pear, Walnut

*[Not all walnut orchards need treatment every year or every generation. If you had greater than 3% worm damage last year and/or are catching high numbers in your traps, you probably need to treat this generation]*

**BIOFIX:** The flight began in many orchards with the first warm weather on **March 27th**. If your orchard traps indicate your flight started later (and some did), use the date that the flight began in your own traps as your biofix.

**TREATMENT OPTIONS:** If the weather remains “normal”, the projected treatment dates are:

*Organophosphate Sprays* (Guthion, Imidan, Lorsban, Penncap, Supracide): Orchards with high populations, spray at 250-300 degree days (DD). This should occur **April 20-24 OR 24-28 days after your own biofix**. Orchards with low populations or more lenient damage standards (walnuts) can wait until 400 DD. This should occur **on May 2 OR 36 days after your own biofix**.

*Check the label to make sure the material is registered on your crop before application.*

*“Reduced Risk” Materials* (Confirm, Success, Last Call): These materials are soft on beneficials and less toxic to people and the environment. They’ve been most successful in orchards with low populations. Confirm needs excellent coverage and should be applied at the beginning of egg hatch about 200 DD. This should occur **April 15th OR 17-29 days after your own biofix**. Success should be applied at the traditional OP timing (above). Last Call should be applied at or shortly after biofix and reapplied at 5 week intervals.

*Mating Disruption:* Dispensers should have been hung in the orchards **before March 27th** or your own orchard biofix. If they went up afterwards, you may want to consider a supplemental control for the first generation.

*Organic Sprays* (Surround, Oil): Both these materials are mild controls and best used as a supplement to Mating Disruption. They should be re-applied every 7-14 days in 100-200 gallons of water/acre. Begin Surround applications at 100 DD (**April 3 OR 7 days after your own biofix**) to discourage egg laying. Begin Oil applications at 200 DD (**April 15th OR 17-29 days after your own biofix**) to suffocate eggs. *Do not apply oil within a few weeks of a sulfur application.*

**FOR MORE DETAILED INFORMATION ON TREATMENTS AND TIMING, CALL FOR A COPY OF OUR MOST RECENT IPM GUIDELINES FOR APPLES, PEARS, OR WALNUTS.**

*Many thanks to Suterra for providing BioLure traps for the Contra Costa County Tree Pest Update Program.*

Note: The above information is provided to serve as baseline data for East Contra Costa County. For best results compare with traps and observations in your own orchards. Depending on pest pressure, sprays may not be necessary. Projected treatment times are based on historical weather data

## **CODLING MOTH UPDATE**

UC Cooperative Extension  
75 Santa Barbara Rd, 2nd floor  
Pleasant Hill, CA 94523

Janet Caprile  
Farm Advisor

### UNITED STATES DEPARTMENT OF AGRICULTURE, UNIVERSITY OF CALIFORNIA AND ALAMEDA/CONTRA COSTA COUNTIES COOPERATING

The University of California prohibits discrimination against or harassment of any person on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition, (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (special disabled veteran, Vietnam-era veteran or any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized). University policy is intended to be consistent with the provisions of applicable State and Federal Laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, university of California, Agriculture and Natural Resources, 300 Lakeside Drive, Oakland, CA 94612-3550 [Telephone: (510) 987-0096].

**What's a Biofix?:** It's just the beginning of the flight for each new generation. We usually have 3 generations for codling moth in this area. We use the Biofix to begin degree day calculations for each generation so we know when egg laying, hatchout, and other lifecycle events will happen. This helps us to time our treatments most effectively.

**What's a Degree Day?** Insects develop faster or slower depending on the temperature. Degree days are a measure based on the maximum and minimum temperatures for each day which allow us to figure out how fast the insects are developing. You may see them abbreviated as DD or °D. If you have the daily maximum & minimum temperatures for your orchard, you can look the degree days up on a chart. If you have access to the Internet, you can get Brentwood weather data and do a degree day calculation from the UC IPM Program home page. This page also lets you calculate the projected degree days based on historical weather data so you can make projections for treatment windows (this is how I do it!). The address is <http://www.ipm.ucdavis.edu>. Give me a call if you would like a degree day chart or more information.